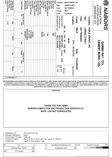

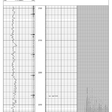

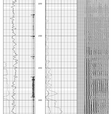

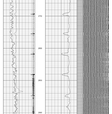

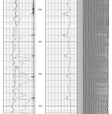

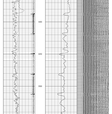

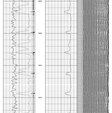

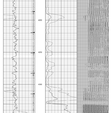

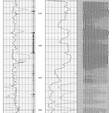

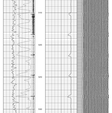

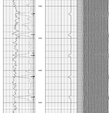

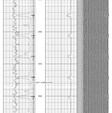

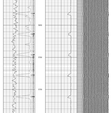

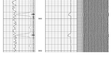

NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

GAMMA RAY / CCL
CEMENT BOND / VDL

Company NOBLE ENERGY, INC
Well LORENZ CHRIS 1
Field WATTENBERG
County WELD
State COLORADO

Company NOBLE ENERGY, INC
Well LORENZ CHRIS 1
Field WATTENBERG
County WELD State COLORADO

Location: API # : 05-123-07233
NE/SW
SEC 26 TWP 4N RGE 66W

Other Services

Permanent Datum GROUND LEVEL Elevation 4766
Log Measured From KELLY BUSHING,9'
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4775
D.F.
G.L. 4766

Date	4-2-14		
Run Number	ONE		
Depth Driller			
Depth Logger			
Bottom Logged Interval	7180		
Top Log Interval			
Casing Size	4 1/2"		
Type Fluid	WATER		
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger On Bottom			
Unit Number	92-0438		
Tool Size / ID Number	2 2/4"PROBE		
Location	FT. LUPTON		
Recorded By	BRACKELSBERG		
Witnessed By	MR.SWIFT		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	4 1/2"			
Liner				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING
NABORS COMPLETION AND PRODUCTION SERVICES CO.
NOTE: LOG NOT CORROLATED

Database File: cbllorenzchris1.db
Dataset Pathname: pass3
Presentation Format: noble en
Dataset Creation: Wed Apr 02 14:25:01 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cbllorenzchris1.db
Dataset Pathname: pass3
Dataset Creation: Wed Apr 02 14:25:01 2014 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

SHOP CALIBRATION	Wed Feb 27 07:52:48 2013				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.6500			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
BEFORE SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number:	110802		
Tool Model:	Probe275Digital		
Performed:	Wed Apr 02 14:11:23 2014		
Depth:	2594.22		ft
Casing Diameter:	4.5		in
	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.0137207	0.0136963	V
Reading in Free Pipe:	2.45903	2.39177	V
Gain:	32.8367	34.1436	
Offset:	0.449457	-0.467641	